/17 cont./ Elegant

501 [531] oars are painted black. The middle third of the blade is covered by a decoration made up of black zigzag lines and dots on a white background (see p. 49).

411 The weapons of the Karaya are still the original ones throughout.

The bows (šuahětě) are of various sizes according to the age and strength of the owner. The longest of the collection measures 220 centimeters, the shortest child's bow 70 centimeters. They [824] consist in part of the wood of the brejauba palm (Astrocaryum sp.) or the so-called pau d'arco (Tecoma sp.). The front side is usually somewhat smoothed down, the ends tapered with thornlike, offset tips (Pl. VI /see p.108 /, 1).

411 /18/ The string (mahūga) and the way it is fastened show certain peculiarities similar to those found among the Guiana 284 tribes. The material is embira bast (Malvaceae sp.), the leaf [824] fiber of a Bromelia (caraguatá) or that of the pati palm (Syagrus botryophora). The length of the string twisted from it exceeds that of the bow by six to eight times. Of a appropriate thickness at one end, it tapers more and more toward the other, finally ending in a thin thread. The strong end is wound around the upper tip of the bow. From there the string goes directly to the lower end and along the front side of the bow upward to about the middle. Then it runs back again and is wound fast around the lower part of the bow with its thinner end. The last, thread-like part hangs down, decorated with a feather tassel.

In order that the wound end does not slip up, it is wound at the place of the curve with a layer of maize leaves which are tied fast with black cotton cords. Sometimes the ends of the bow are also wrapped with thin white threads below the tip. A similar, but looser cotton binding ties the part of the string running on the outside of the bow to the bow wood. This prevents too great a strain on the string. If the upper end of the string breaks, a replacement can easily be brought up by unwinding from below. A break at the lower end is not easily possible because of the counter pressure present there.

/18 cont./

411 The form of the arrows (uehẽ) is very manifold.

The shaft of the arrow consists of two pieces, a lower one of cane and the one inserted in it of wood. The latter bears either a special tip or, sharpened and correspondingly shaped, serves in some way as one itself.

In general the length of the cane shaft amounts to two-thirds of the length of the whole arrow, and that of the wooden shaft one-third.

411 The feathers of the lower cane-end are always placed so
230 that their uppermost tip, wound around itself, lies at the level of the notch. The quill describes a 1/8 to 1/4 turn around the shaft. The heavy arrows, especially those provided with a broad cane tip, usually have a heavier winding of feathers.

Through the twisting of the feather tip, the outer feathers of the quill are sharply bent outward. The inner feathers are cut off short in order to lie closer to the shaft.

In the case of many arrows the lowest piece, which bears the notches and feathering, is separately inserted into the cane shaft. Probably the original arrow end was split here during the cutting or bending the bow and was supplemented by an insert.

411 The feathers are tied with black cotton strings, between
230 which are usually placed small red and yellow decorative feathers.
284 The attached pieces are held together by waimbẽ (Philodendron
[531] sp.) bast bands. The feathered part of the cane end often has
824] crossbands touched up with red lacquer (tamararu).

The following arrow types are represented in the collection:

411 1. War arrows, with point made from the tail-spine of a
[126] thornback, 150-180 centimeters long, two-thirds of which makes up the cane shaft. The spine, six to eight centimeters long and supplied on both sides with countless small barbs, is tied to the wooden shaft with thread and wax in such a way that the lower part projects as a long barb. The wooden shaft itself is painted with red lines, wavy lines, and dots (Pl.VI/see p.108 /, 8).

2. War arrows with cane tip cut in the shape of a knife, related to the Bororo arrows in their form. Total length 140-160 centimeters, of which the cane shaft takes up only one-third. On the upper end of the 3/4 centimeter thick wooden shaft made

/205 cont./

291 283 Clothing of the women. In contrast to the male sex, the female one is clothed from youth onward, and, to be sure, in childhood with belts of black cotton (wădakăna). The older the girl becomes, the tighter and stronger the belt that is worn. The smallest children wear only a couple of black strings wrapped around horizontally, which are joined by a cross-thread, and the ends of which are knotted in front so that /206/ the fringes hang down in a small bundle (Ill. 29). Smaller girls from two to five years old wear loosely interlaced belts likewise tied in front. [284] The horizontal threads of the plaiting are knotted looplike at the ends, and into this loop are tied other cotton threads which serve to tie the belt together and at the same time form the bundle of fringe /Ills. 33-36 appear here/ /207/ (Ill. 30; Pl. 11, Ill. 4). Older girls from about five to ten years old already wear more tightly plaited belts, on which separate tie strands are likewise knotted in the loops, but from these strands separate bunches of fringe hang down (Ill. 31). From then until puberty the girls wear tightly and strongly plaited cotton belts. The tie strands are drawn through the two loops, but bear no fringe. In- [288] stead, a gray tree-bast apron is drawn through the belt, which hangs down in front, is pulled between the legs, and is again fastened to the belt in the back (Pl. 18; Pl. 51, Ill. 2).

291 287 [824] With the onset of maturity, the female sex dons bands made of the bast of the gameleira. There are three kinds of such bands:

1. of red bast from a long-leafed tree (ămbūŏdă),
2. of reddish bast (ăndāhūlĕ or ĭnaùdù),
3. of white bast, from a round-leaved tree (hĭdēūlĕ), the Apeiba jangada, according to Ehrenreich.

These bands are made in the following way: with an edged stone the men cut the outer bark from pieces of trees hewed to the desired length. Later the bast is slit open lengthwise, peeled off, and soaked. Then it is folded together by the women, laid on an inverted mortar, and pounded with a flat rubble stone or an old stone ax.

[TEXT Continues on P. 92]

/231 cont./

*301 *237 The headdresses for the crown of the head, which consist of a rhombic plaited plate, from which rise two Cacicus feathers, each mounted on two feather-sheathed quills ("Beiträge," Ill. 8); the hindhead dance ornament luriná (ibid., Pl. II, 2; IX, 2), which I came across only among the Šavajé in an incomplete specimen; the diadems ahetŏ (ibid., Pl. IX, 5) which spread out at the top when they are tied on; the ornament ŏdjĭ (Pl. 48, Ill. 7) brought back by me from the village on the Tapirapé mouth is similarly constructed.

*301 114 The reasons for this lack among the Karajá may be of three kinds: either the Ehrenreich specimens come from the Šambioá, whose culture, after all, does deviate somewhat from that of the Karajá, or it is only a coincidence that the Karajá did not have these particular ornaments on hand during my presence, or, and this seems to me the most plausible, a different fashion prevailed in Ehrenreich's time. The circumstance that Ehrenreich brought back several specimens of the luriná, whereas I did not come across any among the Karajá and only a single specimen among the Šavajé, seems /232/ to point to the fact that the ornament, formerly so common, is now no longer worn to such an extent.

*301 *237 The ordinary head ornament is represented by the feather caps (dŏlĭdŏlĭ). They are worn by children of both sexes; usually one sees boys walking about all day in this ornament. They consist of a net, into the threads of which individual feathers or feather rosettes fastened to rods are knotted. The caps are drawn over the back of the head and fastened with a chin string (lĕrŭdĭ) (Ill. 76). The nets are made of fine bast fiber or thick bast plaiting. They can be turned inside out, and the chin string serves as a drawstring to close them; they are stored in this manner (Pl. 47, Ill. 1). Stiffened nets are very rare. The nets that can be turned inside out may be grouped according to two characteristics: according to the way the feathers are fastened, and according to their arrangement in zones. According to the type of fastening we distinguish between two chief types: by far the greater number of them show in each case two small feathers tied to the threads (not into the knots) by means of separate Threads (Ill. 77a).

/232 cont./

*301 *237 separate threads (Ill. 77a). A few bear in addition short or long-stemmed rosettes fastened to small rods (Ehrenreich calls this type hatukõ; Ill. 77b). Added to this there are two special types: first, bunches of long white feathers are tied on, which makes the entire cap look very bushy (Pl. 46, Ill. 3); such caps are usually worn by black-painted boys with short-cropped hair. The other, very rare exception is a cap in each of which a long white heron feather is tied (Pl. 46, Ill. 1). These feathers are laid back when worn.

According to the arrangement into zones, they are classified as follows: Nets completely covered with feathers, where no zones are distinguishable; caps with two zones, the lower of which con-

[284]

Ill. 76.
Manner of wearing the feather cap.

Ill. 77 a, b.
Fastening of the feathers in the nets of the feather caps a) 2 feathers each, b) rosette sticks.

sists of bunches of two feathers each, the upper of long feathers (Ill. 3 in Plate 47 is an exception, the lower zone of which consists of feather rosettes, the upper of long feathers); caps with three zones, which consist either of differently colored feathers, or whose lower zone consists of small feather-rods, the middle one of small feathers, and the /Plates 47 and 48 appear here/ /233/ upper one of long feathers, or the lower one of individual feathers, the middle one of rosettes, and the upper one of long feathers (Pl. 47, Ill. 2)

[TEXT CONTINUES ON P. 133]

/233 cont./

*301 *237 Diadems, namely, head bands with the feathers standing vertically, are ornamental pieces which occur only very rarely. There are various kinds of such diadems:

In the case of one, to a string which is tied horizontally around the head, there is fastened by means of vertical plaiting colorful feathers whose quills are usually covered with glued-on white down feathers (Pl. 48, Ill. 5). My three specimens (dõlĭdŏ) [184] all come from the village on the Tapirapé mouth; I did not see [171] any in the other villages. They are very reminiscent of the diadems of the Kayapó (see there /untranslated/).

/234/ A technically very superior ornamental piece is the small head-band (lĩwjĭ) reproduced in Ill. 4 on Plate 48. On the [284] fine head-cord fine little whitish feathers with a brown border are fastened in several layers on top of one another by being tied together with several strings and gummed over with a light-colored adhesive substance. The little feathers are slightly bent outward [184] with the crowns. This unique specimen also comes from the village on the Tapirapé mouth.

In the case of another diadem (õdjĭ), which likewise comes from this village, small vertical cane rods are fastened side by side to the head cord by a second cord that runs through the rods alternately from above and below and is joined each time to the first cord. The rods are also tightly wound with black and white cotton string, and this winding runs from one rod to another and joins them firmly together. Into the upper openings /Ill. 78 appears here/ of the rods are stuck red and yellow parrot feathers (Pl. 48, Ill. 7; Ill. 78). I saw this ornamental piece only in this one specimen. Similar to it are the diadems called ahetó by Ehrenreich ("Beiträge," Pl. IX, 5), in which, besides the little short feathers, long arara feathers project out of the canes, and on which the side edges are not vertical, but diverge at the top.

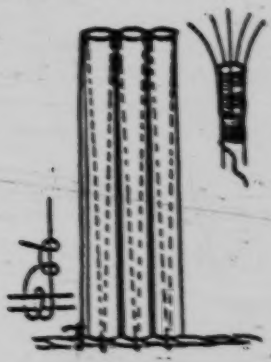
[184] I also saw the closed cane hoop (ãndãdădĭ), around which are fastened vertical, red arara feathers 55 centimeters long (Pl. 48, Ill. 6), only in the village at the Tapirapé mouth.

/234 cont./

*301 *237 Hindhead feathers (wašiwašideloñi) were only rarely observed. They consist of long feathers, several of which are usually fastened side by side to a string, and the quills of which are sometimes covered with small feathers of a different color. The string is tied around the tuft of hair, and the feathers stand up vertically (see also "tuft feathers" above under "Hair Style" /see p. 96/). Similar feathers are worn on a thread around the neck, hanging down the back from the nape of the neck (dʒãzõ-lãhẽdõ).

One of the most common and most striking ornamental pieces is the hindhead wheel (lãhĩdõ; Pl. 49, Ills. 2, 3). This ornamental piece is worn by the male youth at festivities, especially at the wrestling festival; between times it is stored folded in the long, covered basket. To the complete ornament belongs the following five constituent parts: the feather wheel, the bast ring, the horseshoe-shaped disk, the forehead band, and the forehead feathers.

●[284]



Ill. 78.
Construction of the stiff cane diadems.

*301 *237 284 The ornament is worn in the following manner (Ill. 79): The hair /235/ is tied into a tuft in back; the ends hanging down are again tied up so that a thick knot of hair is produced at the back of the head. The bast ring is first placed around this knot and tied together at the bottom. Over the ring and around the knot the fan-shaped, outspread wheel is then tied. The wheel shape is achieved by the knotting of several strings which run through the feathers and emerge at the rim feathers. Further support is provided by the horseshoe-shaped disk which is placed on the middle part of the wheel and likewise tied around the knot. *301 *237 Thus, the wheel rests securely between pad and disk, the pad providing the necessary distance from the hair, while the disk

/235 cont./

*30 holds it spread apart. The wheel, however, is not entirely
*237 closed at the bottom; the size of the open angle varies among the individual specimens. In addition there is still the forehead band, which is placed horizontally around the head and over which the forehead feathers are tied (Pl. 49, Ill. 1).

[114] Ehrenreich did not know how this ornament was worn. He distinguished two kinds: wheels with a one-sided covering layer of small feathers, which he regarded as mantles for feather helmets, and wheels with a two-sided covering of small feathers, which were worn crosswise over the head or as

●[284]

Ill. 79.
Schematic representation of the fastening of the hindhead wheel.

Ill. 80.
Schematic representation of the construction of the hindhead wheel.

a collar around the neck or as a complement to the tuft feathers. With the second and last of these four assumptions he comes closest to actuality. The one-sided or two-sided covering layer has no further significance for the way it is worn. The Indians like to conceal the lower portions of the feathers with feather layers; since both sides are visible in the case of the above-mentioned manner of wearing it, the double-sided covering layer is easily explained, whereas the one-sided covering layer, always found on the front side, is perhaps explained by the fact that on the back side the quills are covered by the disk.

[284] The feather wheels (lāhido) consist of long feathers which are strung fan-shaped on a cord (see Ill. 8, layer c). They are, moreover, connected together by several continuous strings which emerge at the two lateral walls of the fan and, tied together, /236/ hold the wheel open. The whole is so

/236 cont./

*301 flexible that it may be folded together into a roundish cylinder,
*237 in which case the front side is on the outside; they are stored in this fashion (Pl. 50, Ill. 4). The lower parts of the feathers are covered with covering layers, of which the longer, directly supporting one (layer b) always consists of dark green feathers, while the shorter one, supporting at the top (layer a), usually consists of greenish parrot feathers. At the upper ends of the feathers of layer c smaller, little yellow or variegated parrot-feathers are
[284] attached. Either they are tied directly to the quill by a winding of cotton thread (Pl. 49, Ill. 2), or they are fastened to a small rod that runs up along the lower side of the quills of the long feathers, projects above the feathers, is here wound with raw cotton, and bears the small little feathers at the end (layer d) (Pl. 49, Ill. 3). These rods sometimes project to the same length as the long feathers above the latter. Concerning the combination of colors, see below under "Feather Technique" /see pp. 237ff./.

*301 The bast rings consist of a bast pad that is tightly wound
28 with wide bast thread. The pad is bent U-shaped; twisted bast threads are at the ends as tie-strings (Pl. 50, Ill. 3). I obtained three specimens and for each a different name: ähäwŏ, dolähŭnäni, asiklŏrŏ.

The U-shaped disks are of two kinds: either they are made of wood (ähäwŏ; Pl. 49, Ill. 5, from the village on the Tapirapé mouth), or they consist of fine cane strips, which are laid on top of one another with the flat sides, then bent U-shaped as a whole, and interlaced with black cotton strings into a solid disk (lähĭdōlähŭnäni, ähēdŏläliň(ŏ); Pl. 49, Ill. 4).

In the same way, we distinguish two types of forehead bands. In one case, wide bands of gameleira bast are used, to the outer side of which are glued white down feathers (ämbulotä, idŭlă; Pl. 50, Ill. 2); in the other, narrow black plaited cotton bands (wōliĕdäkăn(ă); Pl. 50, Ill. 1).

/236 cont./

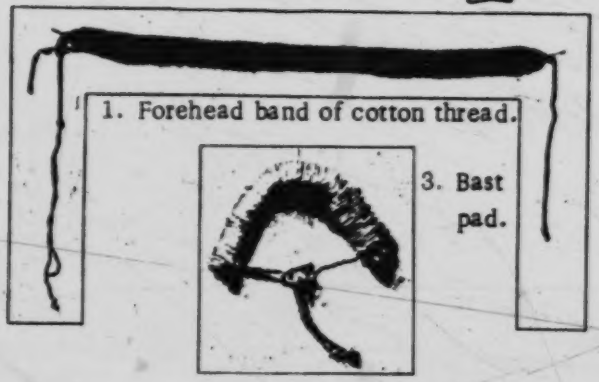
*301 *237 284 The forehead feathers are tied to these forehead bands (Pl. 50, Ill. 5 a-e). These consist of a stiffened cord or rod, to which are fastened two feather rods with long black end-feathers. They are tied over the forehead band with a band in such a way that the two feather tufts project horizontally forward.

One specimen consists of a plaited cotton band, like the forehead band; a small thread, tightly wound, is set on horizontally in front. To it is fastened a rod bound with raw cotton, which forks into two parts. Each part is wound with yellow parrot feathers, out of the center of which project long black feathers (name: kŏdšŭlŭkŭ́-wădjĭŏ́). In the case of another specimen, a long wound thread serves as the holder for the feather tufts, in the case of a third, even a wound rod. Perhaps two other ornamental pieces which terminate in similar tufts belong here. The one consists of a U-shaped /Plates 49 and 50 appear here/ /237/ bent cane rod whose ends are joined together with tie-strings. It is tightly wound with black cotton string and then wrapped with raw cotton. In front, two feather tufts project out of red feather rods with black end feathers. The other consists of a cane rod which is wound in two places in opposite directions with little red feathers. The center piece is free; to it are tied two little cane rods with little red-yellow feathers, which at the ends bear long red-green feathers.

A most peculiar ornamental piece is the feather helmet (ladēnina, Pl. 33). Ehrenreich reproduces it in Plate IX, 5, of his "Beiträge" and calls it tatenera. His specimens are incomplete, since the mantle has no feathers and only a piece of it is covered with white down feathers. My specimen consists of a bast plaiting with red parrot feathers glued to it. White down feathers adorn the lower edge. At the top there is a circle of short vertical canes in which are inserted long red arara feathers. These canes are uncovered in my specimen, whereas in Ehrenreich's specimens, around the narrowed neck below the little canes, four feather wreaths, which in part cover the little canes, are tied one above the other at intervals of two to three fingerbreadths.

[Text continues on p. 141]

[283] [287] *301 *239 •284



2. Forehead band of gameleira bast.

4. Hindhead wheel, folded up (storage form).

5 a-e. Forehead feathers, are tied over forehead bands (1 and 2).

5: Krause--140 E-5 (1908) 1911 SP9 Caraja SP9

/250 cont./

[226] [857] The way such anchored nets are set up is shown by the imitations with which children play (hãdẽkẽ̃). They are fastened to two long end rods; the net is stretched by means of several spaced sticks (Ill. 86). These stakes are driven down in front of the lake inlets, and by stretching the net on them the entrance to the lakes is blocked. From the boat the Indians beat the water and drive the thus frightened fish of the lake toward the entrance into the net, where they are then caught. (Such a device for catching piraruc͡ṹ is called dãõ̃lãĩ̃; see piraruc͡ṹ net above.) Other nets (hãũdũkṹ[ĩ]) are allegedly set up along the sandbanks; the carí fish, which

[524]

Ill. 85. Knot formation of the fish nets.

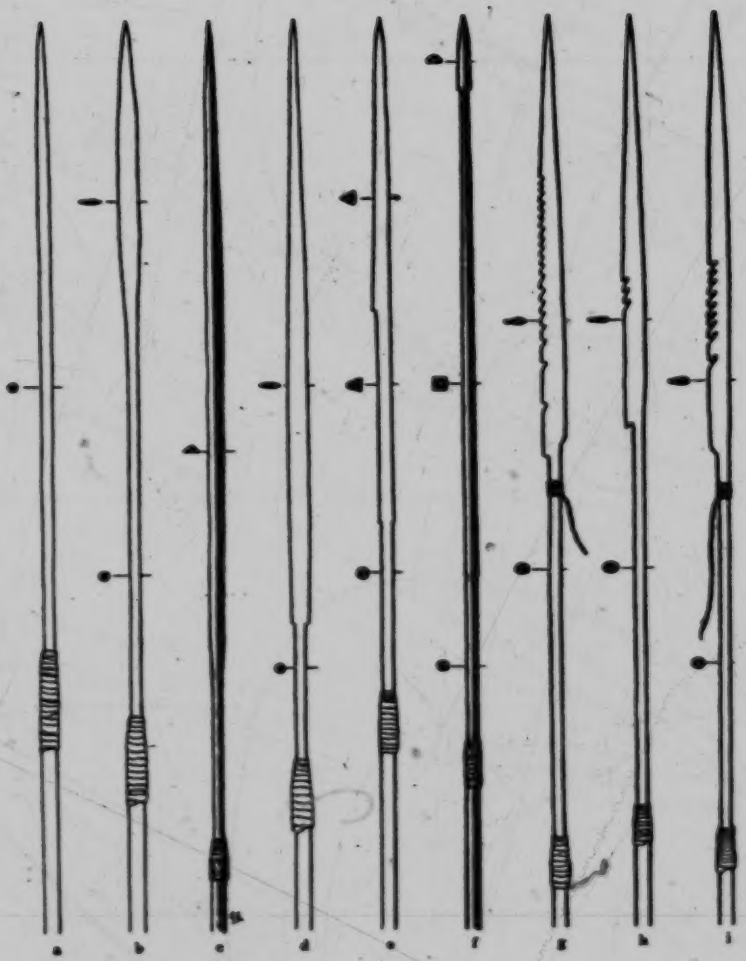
Ill. 86. Barrier fish-net. Child's toy.

[289]

swims against the sandbanks at night, is caught in them and taken out in the morning. I never saw nets of this type set up; probably the narrow nets are used for this.

The largest mass catches are made by poisoning the water of the lakes; but this is at the same time the worst plundering exploitation. The lakes are blocked off by fences (lĩklṍ), which consist of driven piles to which palm leaves are fastened. [824] The stems of the poisonous cipo (timbo: ãnzĩ́) are placed on a forked stick and beaten soft with another stick, whereupon they are shaken out over the lake and a fine dust falls out. Then they are beaten a second time and shaken out. From the boat a second man stirs the water, which takes on a black coloring. The fish are stupefied by it

411
284



Ill. 113 a-i.
Arrows with wooden points.

411
284

[287]
[237]

Ill. 114 a-c.
Arrows with bamboo knives as points.

Ill. 117.
Bone point to be stuck on arrow.

Ill. 115.
Arrow with bone points.

Ill. 116.
Arrow with ray-spine point.

/267 cont./

411 The arrows with the bone point set on them are used ex-
227 clusively for fishing. The bone point is set on in such a way
239 that its rear end projects laterally and thus forms a small barb.
284 It is four to six centimeters long and is fastened to the wooden
314 stem by a fine bast winding and a coating of black resin (Ill. 115). On my specimens this bone point is round throughout, whereas Ehrenreich brought back a second type of such arrow with a flat bone point (Berlin 4008) (1) and a third type with a tubular

1. I obtained arrows with flat bone points only from the Kayapó.

bone set on as a point (Berlin 4009). The stem in the case of these arrows is 40-50 centimeters long, sometimes natural color or painted red, but mostly painted black; the shaft has a length of 100-200 centimeters. The one reproduced in Ill. 117 was probably to be used as a point for an arrow with a monkey bone stuck on it (ũhĭdŏ̃, dũrŏ̃lẽnĭdĭ̃).

A single arrow bears, instead of the bone point, one made of a ray spine (Ill. 116); it comes from the village on the Tapirapé mouth.

411 The stem of the point has no other ornamentation than the
314 black or red painting. It is inserted in the shaft and made fast
531 in it with resin. In order to detach it from the broken shaft and set it on a new one, the tube is warmed over the fire until the resin melts and the stem can be pulled out. The shaft end is cut to fit for the insertion of the stem, so that the transition into the stem is gradual. When the stem is set into the shaft, the latter often splits; the cracks are glued over with black resin.

411 A black, narrow strip of embira is wound over the place
284 of insertion; it is fastened to the shaft with light-colored resin.
314 This winding (dŏ̃dĕ̃) is done in different ways; it either covers stem and shaft in a continuous course, or, separated from the short attachment-winding, there is a longer shaft winding whose intermediate space is sometimes bridged by spirally wound or
531 crossed winding. At this place one arrow will bear spiral incised ornamentation (ũŏ̃hũlăd̃i, ĩlẵdĭ̃), another a black and yellow plaiting. A three-part attachment-winding is very rare (Ill. 118).

/267 cont./

411 [824] The shaft (b'dõlĕ) consists of taquara cane. This cane seems to occur south of the Rio Tapirapé only in the region of the south horde. At the southern end of Bananal Island I came across a village that was on the move southward in order to obtain taquara for their arrows near Leopoldina. The shaft is 0.8-1.0 centimeters thick on the average; its length fluctuates, depending on the type of point (see above). I never saw shaft decorations.

411 237 The feathering, on the average, is 17-22 centimeters long. Of all my arrows there are only two exceptions, one of which is 15 centimeters long, the other 31. The feathering is attached directly to the lower end of the shaft. Ehrenreich reports that the [114] feathered end is often set into the shaft separately. His assumption that in this case the arrows had been repaired /268/ is confirmed by a specimen in my collection which was thus restored (Ill. 119a).

[284] Great care is used in the construction of the feathering. It consists of two feathers standing opposite each other, the upper tips of which are held fast by the notch-lashing, and the inner [314] vanes of which are clipped short. At the place where the quills are supposed to be fastened, the shaft is rubbed with resin; the halved quill ends are pressed on it, whereupon the vanes are set vertically to the shaft and /Ills. 118 and 119 appear here/ are given a turn (an eighth to a quarter of the circumference of the [284] shaft) (Ill. 119b). Then the quill ends are tightly wound with [283] black cotton thread (ãsõdĕbĕ), whereupon the outer vanes are cut to shape (Ill. 119c). In former times, the feathers were given the desired shape by singeing, but since the introduction of iron shears they are cut. Not until the feathering is finished is the point inserted.

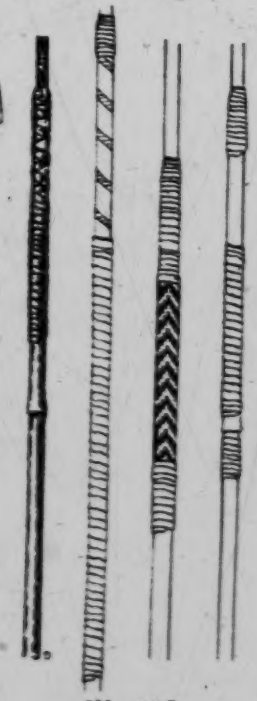
A different kind of feathering (spiral winding through the two halved /269/ /Ill. 120 appears here/ /270/ feathers) is found in the case of a few children's arrows of the north horde (see "Children's Toys" /see p. 241/). It is not yet certain whether this is an old feathering that has now become lost to adults.

/270 cont./

411 237 Little feathers which project in toward the inner part of the feathering and are mostly red, more rarely yellow, are tied into the cotton winding on the quill ends.

[531] The shaft part between the feathers is mostly decorated by bands or rings of red or yellow lacquer (Ill. 120 a-k). This

[284]



Ill. 118.
Point of attachment between the arrow shaft and point stem.

Ill. 119 a-c.
Feathering: a) completed end, b) putting on the feathers, c) complete feathering.

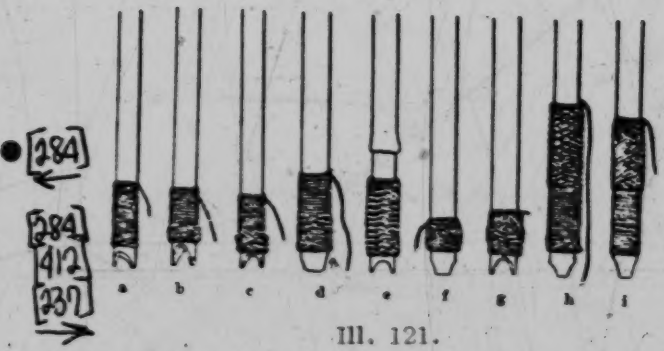
decoration is put on only for the sake of a pleasing appearance.

411 283 [184] The notch winding consists of fine white cotton thread. In the case of the arrows of the Karajá it extends up to the notch. According to Kuriĭ, the characteristic of Karajá arrows lies in this; the Šavajé arrows are said to exhibit a small space between notch and lashing. Among the Šavajé, however, I also obtained arrows with the Karajá winding; perhaps this

[Text Continues on P. 190]

/270 cont./

411 goes back to the lively interchange between the two peoples.
283 The winding consists of parallel circuits; only the uppermost layers show deviations through a crossing of the threads (Ill. 120 a-i). According to Kuriš, four cross-threads are supposed to be characteristic for the Karajá, two cross-threads for the Tapirapé. I did not find this remark confirmed; rather, there was a positively magnificent wealth of the most diverse crossings. The arrows with the two cross-threads (Ill. 121b) and the differently executed notch windings in Ill. 121 h, i, however, were present in the village on the Tapirapé mouth.



Ill. 121.
Notch winding of the arrows.

Ill. 122.
Club groover.

Apparently these windings are the insignia of the makers of the arrows; for upon being questioned about the latter, foreign Karajá always examined the notch-end. I could not find out anything more specific about this, however, especially not whether each individual had his particular mark or whether families (or totem groups?) made specific marks which were the same for all members.

411 The notch (dõnăwŭdŭlõnă) is not cut in very deep and is slightly diagonal. In the case of a few arrows, two little red /271/ feathers are tied into the notch winding and project in the back, beyond the end (Ill. 119c). According to the statement of the Indians, they serve to send off the arrow more easily and do not tire the hand so much. /

/272 cont./

411 [237] [284] The point is formed by a sharpened thigh bone of the jaguar; /Pl. 56 appears here/ /273/ it is about 20 centimeters long. Where it is mounted on the shaft, the latter is wound for about ten centimeters with red cotton string, from the upper circuits of which long tassels of arara feathers hang down. To

Ill. 123. Club.

Ill. 124. Club with plaiting around the handle end.

Ill. 125. Child's club. Karajá.

Ill. 126. Lance.

411 285 [531] this winding is joined below a patterned plaiting which consists of yellow longitudinal strips of taquara interwoven crosswise all around with strips of embira. The plaiting is 50-80 centimeters long; its ornaments are the common plaited ornaments (1).

[113]

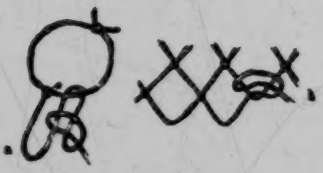
1. See my article, "Die Kunst der Karajá-Indianer /The Art of the Karajá Indians/," Bässler Archiv, Vol. II, No. 1, 1911.

[Text continues on p. 195]

286 →

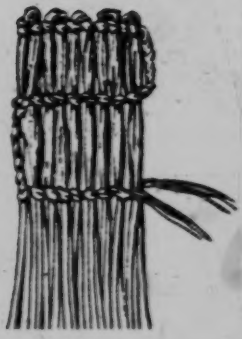
283 ←

Ill. 135.
Bunch of buriti fibers.

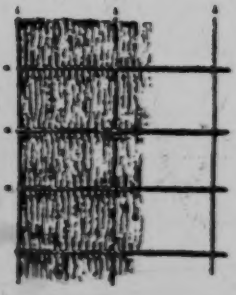


Ill. 136 a, b.
Net knots.

285
284



Ill. 137.
Sample of sleeping-mat plaiting.



Ill. 138.
Schema of the sleeping mat
a) weft,
b) stiffening cords.

/288 cont./

286 is knotted in such a way that the knots come in the center of the length of the mesh. The meshes of the second and subsequent rows are hooked into those of the preceding one and knotted on their lower end. The method of the knot formation is shown in Ill. 136 a, b.

285 For knotting the large sleeping and sitting mats, untwisted
284 buriti bast-fibers are used. These are laid side by side in bunches and these bunches are wound alternately with two twisted bast-fiber strings, so that a continuous weft runs from side to side. On the edge the two strings are twisted together, led along the edge for about three and a half centimeters, and then again plaited through the bunches. Thus, one /Plate 58 appears here/ /289/ weft runs through the whole mat. (See the sample plaiting, Ill. 137 see p. 217/.) At greater intervals, every 10-20 centimeters, a twisted bast string runs between the bunches and parallel to them, in order to give the mat more firmness (b in Ill. 138). The weft does not start at the end of the mat and is not led through to the other end; rather, on both of the narrow sides the ends of
285 the bunches remain free as fringe. Such mats in large dimensions are used to make the protective walls and protective roofs, as well as sleeping and sitting mats. Smaller mats are carried by pregnant women; they are put around the lower body and held together in front with the hands. I never saw small mats patterned with black embira threads as an underlayer for the feet during the continuous standing on the hot sandbanks, such as Ehrenreich describes (Berlin 3907; "Beiträge," p. 21). I obtained a patterned sleeping mat, however, the design of which was made by plaiting in black-colored bast strips (Ill. 22).

Small carrying-sacks (masi) are made in the same way as these mats; the bottoms of these are sometimes plaited cross-shaped (Pl. 57, Ills. 5, 6). The edge is reinforced; the carrying-band likewise consists of buriti bast-fibers.

28 The division of labor in ropemaking and knotting is such
462 that the making of the fiber material is usually incumbent on the women, whereas the twisting of the cords is practiced by men and women, but is usually done only as needed. The knotting of the

[TEXT Continues on p. 220]

/299 cont./

237 284 [314] Fastening of the feathers to the underlayer. Down feathers are generally glued on, and, to be sure, with light resin. All other feathers are fastened differently according to the underlayer.

On rods. Long feathers are either stuck on with the quill on top of the wooden rod (feather wheels) or laid with the halved quill flat on the wooden rod, in which case quill and rod are joined at several places with fine bast (Ill. 154). Concerning arrow feathering, see above under "Weapons" /see pp. 183 ff./.

In order to fasten small little feathers, wide strips of cane are wound spirally with fine thread, whereby the small feathers are tied in in one direction (feather rod; Ill. 155a). Round rods are likewise spirally wound, and while doing so feathers are continuously bound in on all sides /300/ (rosette rod; Ill. 155b). The same principle is applied in the case of ear rosettes and ear tulips, except that there the winding is very tight and the feathers stand very close together; the latter are also spread out by means of the shell disk pressed on top of them; the same is true of the small rosettes which are knotted into the feather caps, except that here everything is done on the smallest scale.

In the fastening to threads, we must distinguish between the feathers standing vertically and the hanging /Ills. 154-156 appear here/ feathers. In order to fasten feathers standing vertically to a string, the quills are bent at the bottom around a thicker string and then the bent end and the quill are wound with a cotton thread. There are differences only in the manner of winding. Either each feather is fastened separately (as in the feather caps, Ill. 77), or one thread joins the feathers continuously in that it is either wound once around each feather or is tied around each feather /301/ (Ill. 156), or, finally, in that the thread is wrapped or tied continuously twice around each feather (Ill. 154).

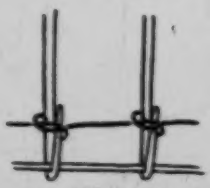
Hanging feathers are fastened to the thread in the same way as the upright feathers; the mutual joining of the individual feathers is achieved throughout by a continuous thread that is wound around the feathers.

/301 cont./

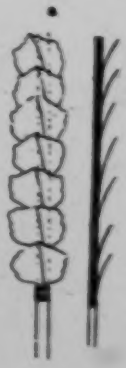
237
284 As in the case of the rosette rods, thick cotton strings are also sometimes wound around spirally, and feathers are continuously tied on.

The fastening of the feathers among themselves is peculiar. Feathers of the same size are either united in bunches which are made by joining two feathers at the bottom by the quills, and the

Ill. 154.
Tying on the long feathers of the feather wheels to the wooden rods.



Ill. 156.
Fastening the feathers side by side by means of a continuous string.

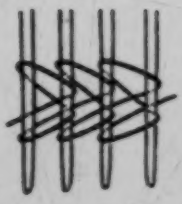


Ill. 155 a, b.
a) Feather rod.
b) Rosette rod.

threads of a number of such feather pairs are tied together into a bundle, /Ills. 157 and 158 appear here/ or by arranging them side by side (see above, feathers fastened to threads , as well as in Ill. 157 /see p. 236/, the joining of the feathers for storage wings [Pl. 58, Ill. 8 a, b]). Sometimes these feathers are joined halfway up by a thread which is drawn from quill to quill (Ill. 154).

/301 cont./

Smaller feathers are popularly fastened to larger ones. They are attached to the upper end of the large feather by the removal of the upper vane so that a piece of the quill remains standing; this quill end is coated with resin, and the small feathers are glued on it and wound. This winding is often covered further with white down feathers glued on it or with white raw cotton wrapped around it. It is especially popular to cover the lower quill ends of upright tall feathers with small feathers. In this case, the ends of the quills are wound spirally, whereby the little covering-feathers are tied in on the front side.



Ill. 157. Joining the feathers of the storage wing.

Ill. 158 a-d. Mountings of the pendant feathers: a) in small fruit, b) in Thevetia fruit, c) snail shell, d) in claw.

Frequently feathers are mounted in fruits, claws, etc., by having a thread drawn through the latter, at the end of which the small feathers are tied as a small cluster (Ill. 158 a-d).

/302/ Feathers (on feather caps) are sometimes reinforced by sewing together two halved feathers by means of a spiral winding with fine threads, in which case, however, the upper ends of the feathers are kept in complete form and overlap each other. The seam is then not visible from the front (Ill. 159).

With regard to the grouping of the feathers, the general rule is that the lower ends must be covered. Hence almost everywhere we find covering layers in the form of smaller feathers which are

/360 cont./

411 arrows with angular wooden points, which were in part colored red, with wooden knob tips (dŏbŏlă), the knob of which was up to four centimeters thick (Ill. 195c), with bamboo-blade points on a separate wooden intermediate rod, with round bone points which are fastened to a wooden insert colored red on the lower part, and with ray-spine points. Especially noteworthy for the Šavajé are the ray-spine points and the arrows with the red-colored intermediate stem. The length of the arrows amounts to 130-160 centimeters; the fish arrows are the longest. The winding with
● [284] black embira at the place where the point is inserted in the shaft is of one to three parts and popularly shows a spiral binding between the individual parts (Ill. 195a). The feathered end is formed analogously to that of the Karajá arrows (Ill. 195b). Its upper winding generally consists of black cotton yarn, into which are usually tied little yellow, seldom red, feathers. (In the case of the Karajá, the situation is exactly reversed.)
[531] Among the Šavajé, too, the intermediate part between the feathers is decorated with rings and bands of red lacquer, which usually are arranged in two groups. The notch lashing, usually white, is ŏnly rarely colored red. On the basis of my specimens,
[284] I cannot confirm Kurisĭ's statement that the Šavajé arrows are recognizable by the notch lashing, which does not quite reach as far as the notch; on these, the lashing always reaches as far as the notch. In the arrangement of this lashing we again find the Karajá types. /Pl. 61 appears here/ /361/ but in simpler form. I did not see little end feathers in connection with the Šavajé arrows.

[184] The clubs (gŏhŏrdĕ), like the Karajá clubs, are grooved only halfway, but differ from the latter by the fact that the intermediate piece on the handle end bears more than three grooves
[531] (four or five) (1) (Ill. 196b). In one specimen, as ornamentation

1. Cf. Karajá, club handles /see pp. 191-193/.

within the grooving, two narrow bands with incised points diametrically opposite each other have been left standing (Ill. 196a).

[Text Continues on P. 326]

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

as a reserve, are kept wound around the bow. The Karayá take great pride in their bows, ornamenting them beautifully with tassels of brilliant feathers. 411 [531]

They use several different styles of arrows. Some are harpoon-like for fishing purposes; others are made with broad blades for hunting; while still others are for use in war. They are all made with the utmost care, as much as one or two days being consumed in the making of but one. Two or three different kinds of wood are always used in constructing a single arrow, one kind being for the spear, or lance part, another kind—heavy palm wood—for the middle staff, and light bamboo wood for the base, and all are spliced and bound together with the greatest nicety by means of long, narrow strips of bark taken from certain climbers, and finally, the weapon is burnished. It is about four feet in length. [461] [824] [284]

The weapons used for fighting at close quarters, which is the method of warfare liked best, are heavy clubs and lances. The clubs are of two kinds—first, shovel-like clubs and round clubs, resembling base-ball bats, varying in length from three to four and a half feet. The lances are nine or ten feet in length, the shaft being of palm wood, and the point, the shin-bone of the spotted *onca*—jaguar—or of a deer. A beautiful, basket-like work of black and white wooden strips is woven, or braided, tightly over the shaft of the spear, and to this is attached tassels of brilliant plumage. The Karayá have spear-throwing sticks, but I understand they are no longer used in war, but for sport only. The contrivance is a long strip of wood so formed that it can be used, sling-like to hurl a spear. In common with all the savage tribes of South America, the weapons, implements, ornaments and ceremonial instruments are all made by the men of the Karayá, while the women make only the household utensils. [1726] [824] [837] [531] 462 171

The Karayá housewife, therefore, makes several styles of pots and pans; but pottery has not yet reached a very high degree of perfection with this tribe for the forms are simple and crude. They do not make pots in the form of natural objects as do the tribes of the Xingú river. Utility, and this 323

9:Gow-Smith T-5 (no date) 1925
SP9 Caraja SP9
Cayapo SP11

skilfully feathered at the end. The arrowheads are fastened to eighteen-inch foreshafts of hard-wood tipped with bone, fitted in three- to four-foot bamboo shafts and bound in place with the strong cord that the native women spin from wild cotton. The binding is firmly cemented with a kind of resin. Long needle-like arrows tipped with hard-wood are for shooting birds; the sharp bamboo tips curved hollowly are for deer and jaguars, for they permit the wounded animal

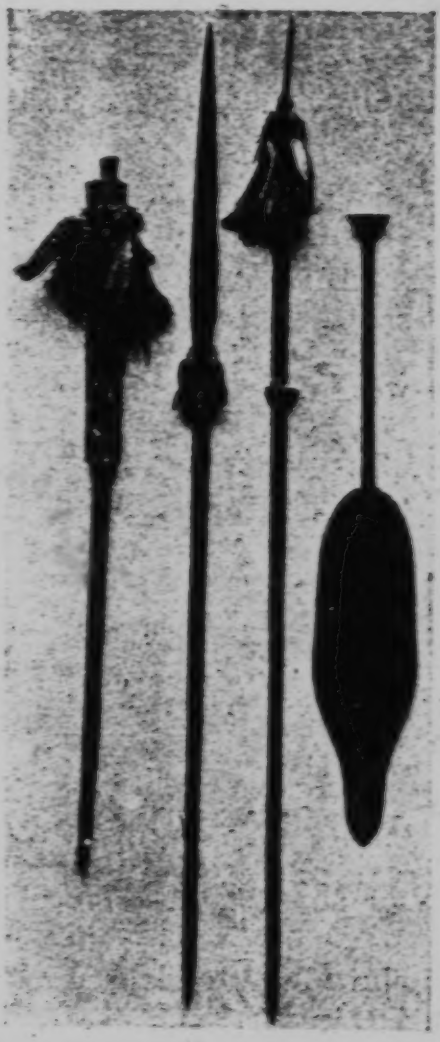


FIG. 98.—Caraja objects (grave-post, two spears, and a paddle)